

## CRF Errors Corrected by the STIC System Branch

Serial Number: 10/03, 2013CRF Processing Date: 7-15-02Edited by: M. SPENCER

Verified by: \_\_\_\_\_ (STIC staff)

Changed a file from non-ASCII to ASCII

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

Edited a format error in the Current Application Data section, specifically:

Edited the Current Application Data section with the actual current number. The number inputted by the applicant was  the prior application data; or  other \_\_\_\_\_

Added the mandatory heading and subheadings for "Current Application Data".

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

Inserted colons after headings/subheadings. Headings edited included:

Deleted extra, invalid, headings used by an applicant, specifically:

Deleted:  non-ASCII "garbage" at the beginning/end of files;  secretary initials/filename at end of file;  page numbers throughout text;  other invalid text, such as \_\_\_\_\_

Inserted mandatory headings, specifically:

Corrected an obvious error in the response, specifically:

Edited identifiers where upper case is used but lower case is required, or vice versa.

Corrected an error in the Number of Sequences field, specifically:

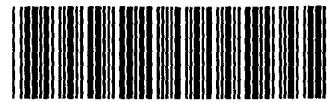
A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected:

Other: Added mandatory numeric identifier 52207 to SEQ ID #: 10

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95



OIE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002  
TIME: 10:24:10

Input Set : A:\PTOMS.txt  
Output Set: N:\CRF3\07152002\J032201B.raw

```

3 <110> APPLICANT: Van Rooijen, Gijs
4      Deckers, Harm
5      Heifetz, Peter Bernard
6      Briggs, Steven
7      Dalmia, Bipin Kumar
8      Del Val, Greg
9      Zaplachinski, Steve
10     Moloney, Maurice
12 <120> TITLE OF INVENTION: METHODS FOR THE PRODUCTION OF MULTIMERIC PROTEINS, AND
RELATED
13     COMPOSITIONS
15 <130> FILE REFERENCE: 38814 351B
17 <140> CURRENT APPLICATION NUMBER: 10/032,201B
18 <141> CURRENT FILING DATE: 2001-12-19
20 <160> NUMBER OF SEQ ID NOS: 313
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 22
26 <212> TYPE: DNA
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Primer
32 <400> SEQUENCE: 1
33 taccatggct tcggaagaag ga
35 <210> SEQ ID NO: 2
36 <211> LENGTH: 22
37 <212> TYPE: DNA
38 <213> ORGANISM: Artificial Sequence
40 <220> FEATURE:
41 <223> OTHER INFORMATION: Primer
43 <400> SEQUENCE: 2
44 gaaagcttaa gccaaatgtt tg
46 <210> SEQ ID NO: 3
47 <211> LENGTH: 36
48 <212> TYPE: DNA
49 <213> ORGANISM: Artificial Sequence
51 <220> FEATURE:
52 <223> OTHER INFORMATION: Primer
54 <400> SEQUENCE: 3
55 ggccagcaca ctaccatgaa tggtctcgaa actcac
57 <210> SEQ ID NO: 4
58 <211> LENGTH: 28
59 <212> TYPE: DNA
60 <213> ORGANISM: Artificial Sequence

```

22

22

36

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/032, 201BDATE: 07/15/2002  
TIME: 10:24:10Input Set : A:\PTOMS.txt  
Output Set: N:\CRF3\07152002\J032201B.raw

62 <220> FEATURE:  
63 <223> OTHER INFORMATION: Primer  
65 <400> SEQUENCE: 4  
66 ttaagctca atcactctta ccttgctg 28  
68 <210> SEQ ID NO: 5  
69 <211> LENGTH: 72  
70 <212> TYPE: DNA  
71 <213> ORGANISM: Artificial Sequence  
73 <220> FEATURE:  
74 <223> OTHER INFORMATION: Primer  
76 <400> SEQUENCE: 5  
77 actggagatg ttgactcgac ggatactacg gattggtcga cggttatggaa 60  
78 gtgatgcgc gc 72  
80 <210> SEQ ID NO: 6  
81 <211> LENGTH: 80  
82 <212> TYPE: DNA  
83 <213> ORGANISM: Artificial Sequence  
85 <220> FEATURE:  
86 <223> OTHER INFORMATION: Primer  
88 <400> SEQUENCE: 6  
89 atccgtcgag tcaacatctc cagttccctc ggtggtctcg ttagccttcg atccagcaat 60  
90 ctcttgttaag aatgctctgc 80  
92 <210> SEQ ID NO: 7  
93 <211> LENGTH: 22  
94 <212> TYPE: DNA  
95 <213> ORGANISM: Artificial Sequence  
97 <220> FEATURE:  
98 <223> OTHER INFORMATION: Primer  
100 <400> SEQUENCE: 7  
101 gtggaagctt atggagatgg ag 22  
103 <210> SEQ ID NO: 8  
104 <211> LENGTH: 1002  
105 <212> TYPE: DNA  
106 <213> ORGANISM: Arabidopsis thaliana  
108 <400> SEQUENCE: 8  
109 atgaatggtc tggaaactca caacacaagg ctctgtatcg taggaagtgg cccagcggca 60  
110 cacacggcgg cgattttacgc agcttagggct gaacttaaac ctcttctt cgaaggatgg 120  
111 atggctaacgc acatcgctcc cgggtggtcaa ctaacaacca ccacccgacgt cgagaatttc 180  
112 cccggatttc cagaaggatcgat tctcggagta gagctcactg acaaattccg taaaacaatcg 240  
113 gagcgattcg gtactacat atttacagag acgggtgacga aagtgcgatatt ctcttcgaaa 300  
114 ccgtttaagc tattcacaga ttcaaaaagcc attctcgctg acgctgtgtat tctcgctact 360  
115 ggagctgtgg ctaagcggct tagcttcgtt ggatctgg aagggttctgg aggtttctgg 420  
116 aaccgtggaa tctccgctt tgctgttgc gacggagctg ctccgatatt ccgtaacaaa 480  
117 cctcttgcgg tgatcggtgg aggcgattca gcaatggaaag aagcaaaactt tcttacaaaa 540  
118 tatggatcta aagtgtatataat aatccatagg agagatgctt ttagagcgatc taagattatg 600  
119 cagcagcggag ctttgtctaa tcctaagatt gatgtgattt ggaactcgatc tggatggaa 660  
120 gcttatggag atggagaaaag agatgtgtt ggaggattga aagtgaagaaa tggatggatc 720  
121 ggagatgttt ctgatttaaa agtttcttgc ttgttctttt ctattggatca tgagccagct 780  
122 accaagtttt tggatggatc tggatggatc gttatgttgc cacgaagcct 840

**RAW SEQUENCE LISTING**

PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002

TIME: 10:24:10

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002

TIME: 10:24:10

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

181 gag cga ttc ggt act acg ata ttt aca gag acg gtg acg aaa gtc gat	288
182 Glu Arg Phe Gly Thr Thr Ile Phe Thr Glu Thr Val Thr Lys Val Asp	
183 85 90 95	
185 ttc tct tcg aaa ccg ttt aag cta ttc aca gat tca aaa gcc att ctc	336
186 Phe Ser Ser Lys Pro Phe Lys Leu Phe Thr Asp Ser Lys Ala Ile Leu	
187 100 105 110	
189 gct gac gct gtg att ctc gct act gga gct gtg gct aag cgg ctt agc	384
190 Ala Asp Ala Val Ile Leu Ala Thr Gly Ala Val Ala Lys Arg Leu Ser	
191 115 120 125	
193 ttc gtt gga tct ggt gaa ggt tct gga ggt ttc tgg aac cgt gga atc	432
194 Phe Val Gly Ser Gly Glu Gly Ser Gly Gly Phe Trp Asn Arg Gly Ile	
195 130 135 140	
197 tcc gct tgt gct gtt tgc gac gga gct gct ccg ata ttc cgt aac aaa	480
198 Ser Ala Cys Ala Val Cys Asp Gly Ala Ala Pro Ile Phe Arg Asn Lys	
199 145 150 155 160	
201 cct ctt gcg gtg atc ggt gga ggc gat tca gca atg gaa gaa gca aac	528
202 Pro Leu Ala Val Ile Gly Gly Asp Ser Ala Met Glu Glu Ala Asn	
203 165 170 175	
205 ttt ctt aca aaa tat gga tct aaa gtg tat ata atc cat agg aga gat	576
206 Phe Leu Thr Lys Tyr Gly Ser Lys Val Tyr Ile Ile His Arg Arg Asp	
207 180 185 190	
209 gct ttt aga gcg tct aag att atg cag cag cga gct ttg tct aat cct	624
210 Ala Phe Arg Ala Ser Lys Ile Met Gln Gln Arg Ala Leu Ser Asn Pro	
211 195 200 205	
213 aag att gat gtg att tgg aac tcg tct gtt gtg gaa gct tat gga gat	672
214 Lys Ile Asp Val Ile Trp Asn Ser Ser Val Val Glu Ala Tyr Gly Asp	
215 210 215 220	
217 gga gaa aga gat gtg ctt gga gga ttg aaa gtg aag aat gtg gtt acc	720
218 Gly Glu Arg Asp Val Leu Gly Gly Leu Lys Val Lys Asn Val Val Thr	
219 225 230 235 240	
221 gga gat gtt tct gat tta aaa gtt tct gga ttg ttc ttt gct att ggt	768
222 Gly Asp Val Ser Asp Leu Lys Val Ser Gly Leu Phe Phe Ala Ile Gly	
223 245 250 255	
225 cat gag cca gct acc aag ttt ttg gat ggt ggt gtt gag tta gat tcg	816
226 His Glu Pro Ala Thr Lys Phe Leu Asp Gly Gly Val Glu Leu Asp Ser	
227 260 265 270	
229 gat ggt tat gtt gtc acg aag cct ggt act aca cag act agc gtt ccc	864
230 Asp Gly Tyr Val Val Thr Lys Pro Gly Thr Thr Gln Thr Ser Val Pro	
231 275 280 285	
233 gga gtt ttc gct gcg ggt gat gtt cag gat aag aag tat agg caa gcc	912
234 Gly Val Phe Ala Ala Gly Asp Val Gln Asp Lys Lys Tyr Arg Gln Ala	
235 290 295 300	
237 atc act gct gca gga act ggg tgc atg gca gct ttg gat gca gag cat	960
238 Ile Thr Ala Ala Gly Thr Gly Cys Met Ala Ala Leu Asp Ala Glu His	
239 305 310 315 320	
241 tac tta caa gag att gga tct cag caa ggt aag agt gat tga	1002
242 Tyr Leu Gln Glu Ile Gly Ser Gln Gln Gly Lys Ser Asp *	
243 325 330	
247 <210> SEQ ID NO: 11	

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002  
TIME: 10:24:10

Input Set : A:\PTOMS.txt  
Output Set: N:\CRF3\07152002\J032201B.raw

248 <211> LENGTH: 333  
 249 <212> TYPE: PRT  
 250 <213> ORGANISM: Arabidopsis thaliana  
 252 <400> SEQUENCE: 11  
 253 Met Asn Gly Leu Glu Thr His Asn Thr Arg Leu Cys Ile Val Gly Ser  
 254 1 5 10 15  
 255 Gly Pro Ala Ala His Thr Ala Ala Ile Tyr Ala Ala Arg Ala Glu Leu  
 256 20 25 30  
 257 Lys Pro Leu Leu Phe Glu Gly Trp Met Ala Asn Asp Ile Ala Pro Gly  
 258 35 40 45  
 259 Gly Gln Leu Thr Thr Thr Asp Val Glu Asn Phe Pro Gly Phe Pro  
 260 50 55 60  
 261 Glu Gly Ile Leu Gly Val Glu Leu Thr Asp Lys Phe Arg Lys Gln Ser  
 262 65 70 75 80  
 263 Glu Arg Phe Gly Thr Thr Ile Phe Thr Glu Thr Val Thr Lys Val Asp  
 264 85 90 95  
 265 Phe Ser Ser Lys Pro Phe Lys Leu Phe Thr Asp Ser Lys Ala Ile Leu  
 266 100 105 110  
 267 Ala Asp Ala Val Ile Leu Ala Thr Gly Ala Val Ala Lys Arg Leu Ser  
 268 115 120 125  
 269 Phe Val Gly Ser Gly Glu Gly Ser Gly Gly Phe Trp Asn Arg Gly Ile  
 270 130 135 140  
 271 Ser Ala Cys Ala Val Cys Asp Gly Ala Ala Pro Ile Phe Arg Asn Lys  
 272 145 150 155 160  
 273 Pro Leu Ala Val Ile Gly Gly Asp Ser Ala Met Glu Glu Ala Asn  
 274 165 170 175  
 275 Phe Leu Thr Lys Tyr Gly Ser Lys Val Tyr Ile Ile His Arg Arg Asp  
 276 180 185 190  
 277 Ala Phe Arg Ala Ser Lys Ile Met Gln Gln Arg Ala Leu Ser Asn Pro  
 278 195 200 205  
 279 Lys Ile Asp Val Ile Trp Asn Ser Ser Val Val Glu Ala Tyr Gly Asp  
 280 210 215 220  
 281 Gly Glu Arg Asp Val Leu Gly Gly Leu Lys Val Lys Asn Val Val Thr  
 282 225 230 235 240  
 283 Gly Asp Val Ser Asp Leu Lys Val Ser Gly Leu Phe Phe Ala Ile Gly  
 284 245 250 255  
 285 His Glu Pro Ala Thr Lys Phe Leu Asp Gly Gly Val Glu Leu Asp Ser  
 286 260 265 270  
 287 Asp Gly Tyr Val Val Thr Lys Pro Gly Thr Thr Gln Thr Ser Val Pro  
 288 275 280 285  
 289 Gly Val Phe Ala Ala Gly Asp Val Gln Asp Lys Lys Tyr Arg Gln Ala  
 290 290 295 300  
 291 Ile Thr Ala Ala Gly Thr Gly Cys Met Ala Ala Leu Asp Ala Glu His  
 292 305 310 315 320  
 293 Tyr Leu Gln Glu Ile Gly Ser Gln Gln Gly Lys Ser Asp  
 294 325 330  
 297 <210> SEQ ID NO: 12  
 298 <211> LENGTH: 332  
 299 <212> TYPE: PRT

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/15/2002  
PATENT APPLICATION: US/10/032,201B TIME: 10:24:11

Input Set : A:\PTOMS.txt  
Output Set: N:\CRF3\07152002\J032201B.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:101; Xaa Pos. 16,17,38,42,45,54,55,58,66,72,75,79,80,81,94,99,103  
Seq#:109; Xaa Pos. 17,38,42,55,58,60,72,107  
Seq#:134; Xaa Pos. 21,35  
Seq#:245; Xaa Pos. 33,45,46  
Seq#:275; Xaa Pos. 9,11  
Seq#:287; Xaa Pos. 524  
Seq#:288; Xaa Pos. 666  
Seq#:290; Xaa Pos. 523  
Seq#:293; Xaa Pos. 520  
Seq#:294; Xaa Pos. 578  
Seq#:295; Xaa Pos. 523  
Seq#:296; Xaa Pos. 576  
Seq#:300; Xaa Pos. 612  
Seq#:303; Xaa Pos. 523  
Seq#:304; Xaa Pos. 527  
Seq#:307; Xaa Pos. 497  
Seq#:309; Xaa Pos. 497  
Seq#:312; Xaa Pos. 525  
Seq#:313; Xaa Pos. 498

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/032, 201B

DATE: 07/15/2002  
TIME: 10:24:11

Input Set : A:\PTOMS.txt  
Output Set: N:\CRF3\07152002\J032201B.raw

L:155 M:283 W: Missing Blank Line separator, <220> field identifier  
L:529 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:532 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16  
L:535 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16  
L:731 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:734 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19  
L:737 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19  
L:850 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19  
L:940 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:943 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:22  
L:1145 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:24  
L:1424 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1427 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27  
L:1430 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27  
L:1723 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:30  
L:2056 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:33  
L:2317 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
L:2321 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
L:2326 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
L:4689 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0  
L:4691 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:16  
L:4693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:32  
L:4695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:48  
L:4697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:64  
L:4699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:80  
L:4701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:96  
L:4878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:16  
L:4880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:32  
L:4882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:48  
L:4884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:64  
L:4888 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:96  
L:5471 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:16  
L:5473 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:32  
L:9673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:32  
L:11024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:275 after pos.:0  
L:11581 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:512  
L:11678 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:288 after pos.:656  
L:11831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:512  
L:12054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:293 after pos.:512  
L:12141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:294 after pos.:576  
L:12220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:295 after pos.:512  
L:12305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:296 after pos.:560  
L:12620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:300 after pos.:608  
L:12833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:303 after pos.:512  
L:12912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:304 after pos.:512  
L:13135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:307 after pos.:496  
L:13242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:309 after pos.:496  
L:13401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:312 after pos.:512

**VERIFICATION SUMMARY**  
PATENT APPLICATION: **US/10/032,201B**

DATE: 07/15/2002  
TIME: 10:24:11

Input Set : **A:\PTOMS.txt**  
Output Set: **N:\CRF3\07152002\J032201B.raw**

L:13478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:313 after pos.:496

Does Not Comply  
Corrected Diskette Needed



OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002

TIME: 10:05:14

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

3 <110> APPLICANT: Van Rooijen, Gijs  
 4       Deckers, Harm  
 5       Heifetz, Peter Bernard  
 6       Briggs, Steven  
 7       Dalmia, Bipin Kumar  
 8       Del Val, Greg  
 9       Zaplachinski, Steve  
 10      Moloney, Maurice  
 12 <120> TITLE OF INVENTION: METHODS FOR THE PRODUCTION OF MULTIMERIC PROTEINS, AND  
 RELATED  
 13      COMPOSITIONS  
 15 <130> FILE REFERENCE: 38814 351B  
 17 <140> CURRENT APPLICATION NUMBER: 10/032,201B  
 18 <141> CURRENT FILING DATE: 2001-12-19  
 20 <160> NUMBER OF SEQ ID NOS: 313  
 22 <170> SOFTWARE: FastSEQ for Windows Version 4.0

## ERRORED SEQUENCES

151 <210> SEQ ID NO: 10  
 152 <211> LENGTH: 1002  
 153 <212> TYPE: DNA  
 154 <213> ORGANISM: Arabidopsis thaliana  
 156 <221> NAME/KEY: CDS  
 157 <222> LOCATION: (1)...(1002)  
 158 <223> OTHER INFORMATION: cDNA encoding NADPH thioredoxin reductase  
 E--> 160 <400> SEQUENCE: 10  
 161 atg aat ggt ctc gaa act cac aac aca agg ctc tgt atc gta gga agt   48  
 162 Met Asn Gly Leu Glu Thr His Asn Thr Arg Leu Cys Ile Val Gly Ser  
 163   1               5               10               15  
 165 ggc cca gcg gca cac acg gcg gcg att tac gca gct agg gct gaa ctt   96  
 166 Gly Pro Ala Ala His Thr Ala Ala Ile Tyr Ala Ala Arg Ala Glu Leu  
 167       20               25               30  
 169 aaa cct ctt ctc ttc gaa gga tgg atg gct aac gac atc gct ccc ggt   144  
 170 Lys Pro Leu Leu Phe Glu Gly Trp Met Ala Asn Asp Ile Ala Pro Gly  
 171       35               40               45  
 173 ggt caa cta aca acc acc gac gtc gag aat ttc ccc gga ttt cca   192  
 174 Gly Gln Leu Thr Thr Asp Val Glu Asn Phe Pro Gly Phe Pro  
 175       50               55               60  
 177 gaa ggt att ctc gga gta gag ctc act gac aaa ttc cgt aaa caa tcg   240  
 178 Glu Gly Ile Leu Gly Val Glu Leu Thr Asp Lys Phe Arg Lys Gln Ser  
 179       65               70               75               80  
 181 gag cga ttc ggt act acg ata ttt aca gag acg gtg acg aaa gtc gat   288

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002

TIME: 10:05:14

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\07152002\J032201B.raw

182	Glu	Arg	Phe	Gly	Thr	Thr	Ile	Phe	Thr	Glu	Thr	Val	Thr	Lys	Val	Asp	
183			85							90					95		
185	ttc	tct	tcg	aaa	ccg	ttt	aag	cta	tcc	aca	gat	tca	aaa	gcc	att	ctc	336
186	Phe	Ser	Ser	Lys	Pro	Phe	Lys	Leu	Phe	Thr	Asp	Ser	Lys	Ala	Ile	Leu	
187										105					110		
189	gct	gac	gct	gtg	att	ctc	gct	act	gga	gct	gtg	gct	aag	cgg	ctt	agc	384
190	Ala	Asp	Ala	Val	Ile	Leu	Ala	Thr	Gly	Ala	Val	Ala	Lys	Arg	Leu	Ser	
191										115					125		
193	ttc	gtt	gga	tct	ggg	aaa	ggg	tct	gga	ggg	ttc	tgg	aac	cgt	gga	atc	432
194	Phe	Val	Gly	Ser	Gly	Glu	Gly	Ser	Gly	Gly	Phe	Trp	Asn	Arg	Gly	Ile	
195										130					140		
197	tcc	gct	tgt	gct	gtt	tgc	gac	gga	gct	gct	ccg	ata	tcc	cgt	aac	aaa	480
198	Ser	Ala	Cys	Ala	Val	Cys	Asp	Gly	Ala	Ala	Pro	Ile	Phe	Arg	Asn	Lys	
199										145					155		
201	cct	ctt	gcg	gtg	atc	ggg	gga	ggc	gat	tca	gca	atg	gaa	gaa	gca	aac	528
202	Pro	Leu	Ala	Val	Ile	Gly	Gly	Gly	Asp	Ser	Ala	Met	Glu	Glu	Ala	Asn	
203										165					175		
205	ttt	ctt	aca	aaa	tat	gga	tct	aaa	gtg	tat	ata	atc	cat	agg	aga	gat	576
206	Phe	Leu	Thr	Lys	Tyr	Gly	Ser	Lys	Val	Tyr	Ile	Ile	His	Arg	Arg	Asp	
207										180					190		
209	gct	ttt	aga	gcg	tct	aag	att	atg	cag	cag	cga	gct	ttg	tct	aat	cct	624
210	Ala	Phe	Arg	Ala	Ser	Lys	Ile	Met	Gln	Gln	Arg	Ala	Leu	Ser	Asn	Pro	
211										195					205		
213	aag	att	gat	gtg	att	tgg	aac	tgc	tct	gtt	gtg	gaa	gct	tat	gga	gat	672
214	Lys	Ile	Asp	Val	Ile	Trp	Asn	Ser	Ser	Val	Val	Val	Glu	Ala	Tyr	Gly	Asp
215										210					220		
217	gga	gaa	aga	gat	gtg	ctt	gga	gga	ttg	aaa	gtg	aag	aat	gtg	gtt	acc	720
218	Gly	Glu	Arg	Asp	Val	Leu	Gly	Gly	Leu	Lys	Val	Lys	Asn	Val	Val	Thr	
219										225					235		
221	gga	gat	gtt	gat	tta	aaa	gtt	tct	gga	ttg	ttc	ttt	gct	att	gtt	768	
222	Gly	Asp	Val	Ser	Asp	Leu	Lys	Val	Ser	Gly	Leu	Phe	Phe	Ala	Ile	Gly	
223										245					250		
225	cat	gag	cca	gct	acc	aag	ttt	ttg	gat	ggg	ggg	gtt	gag	tta	gat	tcg	816
226	His	Glu	Pro	Ala	Thr	Lys	Phe	Leu	Asp	Gly	Gly	Val	Glu	Leu	Asp	Ser	
227										260					265		
229	gat	ggt	tat	gtt	gtc	acg	aag	cct	ggg	act	aca	cag	act	agc	gtt	ccc	864
230	Asp	Gly	Tyr	Val	Val	Thr	Lys	Pro	Gly	Thr	Thr	Gln	Thr	Ser	Val	Pro	
231										275					280		
233	gga	gta	ttc	gct	gcg	ggg	gtt	gat	gtt	cag	gat	aag	aag	tat	agg	caa	912
234	Gly	Val	Phe	Ala	Ala	Gly	Asp	Val	Gln	Asp	Lys	Lys	Tyr	Arg	Gln	Ala	
235										290					295		
237	atc	act	gct	gca	gga	act	ggg	tgc	atg	gca	gct	ttg	gat	gca	gag	cat	960
238	Ile	Thr	Ala	Ala	Gly	Thr	Gly	Cys	Met	Ala	Ala	Leu	Asp	Ala	Glu	His	
239										305					310		
241	tac	tta	caa	gag	att	gga	tct	cag	caa	ggg	aag	agt	agt	gat	tga		1002
242	Tyr	Leu	Gln	Glu	Ile	Gly	Ser	Gln	Gln	Gly	Lys	Ser	Asp	*			
243										325					330		

**VERIFICATION SUMMARY**  
PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002  
TIME: 10:05:18

Input Set : A:\PTOMS.txt  
Output Set: N:\CRF3\07152002\J032201B.raw

L:13478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:313 after pos.:496

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/032,201B

DATE: 07/15/2002  
TIME: 10:05:18

Input Set : A:\PTOMS.txt  
Output Set: N:\CRF3\07152002\J032201B.raw

L:160 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:10  
L:529 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:532 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16  
L:535 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16  
L:731 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:734 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19  
L:737 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19  
L:850 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19  
L:940 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:943 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:22  
L:1145 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:24  
L:1424 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1427 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27  
L:1430 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27  
L:1723 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:30  
L:2056 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:33  
L:2317 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
L:2321 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
L:2326 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
L:4689 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0  
L:4691 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:16  
L:4693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:32  
L:4695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:48  
L:4697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:64  
L:4699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:80  
L:4701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:96  
L:4878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:16  
L:4880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:32  
L:4882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:48  
L:4884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:64  
L:4888 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:96  
L:5471 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:16  
L:5473 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:32  
L:9673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:32  
L:11024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:275 after pos.:0  
L:11581 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:512  
L:11678 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:288 after pos.:656  
L:11831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:512  
L:12054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:293 after pos.:512  
L:12141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:294 after pos.:576  
L:12220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:295 after pos.:512  
L:12305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:296 after pos.:560  
L:12620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:300 after pos.:608  
L:12833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:303 after pos.:512  
L:12912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:304 after pos.:512  
L:13135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:307 after pos.:496  
L:13242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:309 after pos.:496  
L:13401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:312 after pos.:512